

# MI PRAMS Delivery



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## Special points of interest:

- ◇ Of women who delivered in 2000, 85.34% used a contraceptive method during their postpartum period.
- ◇ The overall most popular method was the birth control pill followed by the condom.
- ◇ A large proportion of women (79.32%) receive family planning counseling before delivery.

## Contraception Use During the Postpartum Period

Several times during the course of her reproductive life, a woman may re-evaluate her decision to use contraception. This reassessment may be brought about by life changing events such as marriage, illness, family, career, and educational goals. The recent birth of a

child, may also cause a woman to consider birth control. Both the decision of whether or not to use contraception and the decision of what to use are important. This quarter's edition of MI PRAMS Delivery newsletter will highlight:

- ◇ the prevalence of contraceptive use
- ◇ identify potential barriers to contraceptive use; and
- ◇ prenatal and postpartum counseling about the use of birth control.

## Postpartum Contraception Use in Michigan, 2000

The PRAMS mail/telephone survey is conducted 2-6 months after delivery. Consequently, the responses regarding postpartum contraceptive use reflects this time period. In 2000, an estimated 109,100 Michigan women (85.34%; 95% CI 82.87%-87.81%) indicated

that they were using a contraceptive method in their postpartum period. Over 80% of women in all age groups, with the exception of over the age of forty years, reported using a contraceptive method. The prevalence of contraceptive use in the over forty group was

74.80%. The prevalence of women using some method of birth control did not differ significantly across the various levels of education (Table #1): 85.53% (95%CI 79.43%-91.63%) of women with less than a high school diploma, 83.86% (95%CI 79.27%-

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TABLE 1

Proportion of women using a method of contraception during their postpartum period  
2000 Michigan PRAMS

	Estimated Population	Percent (%)	95% CI of Percent
<b>Total</b>	109,099.60	85.34%	± 2.47
<b>Maternal Age</b>			
19 years or less	13,606.27	88.04%	± 6.53
20-29 years	58,235.14	88.28%	± 3.08
30-39 years	35,050.59	80.63%	± 4.80
40 years or more	2,207.61	74.80%	± 19.44
<b>Education</b>			
Less than HS diploma	15,513.06	85.53%	± 6.10
HS diploma / GED	37,376.17	83.86%	± 4.59
Some college	26,905.65	89.26%	± 4.14
College graduate or beyond	26,179.30	83.10%	± 5.33
<b>Race / Ethnicity</b>			
Black	16,954.37	85.50%	± 2.84
Non-Black	91,221.68	85.31%	± 2.90
<b>Marital Status</b>			
Married	92,141.66	84.79%	± 2.82
Other	1,294.62	88.66%	± 3.78
<b>Medicaid Status</b>			
Medicaid @ any time*	32,531.78	86.84%	± 3.94
Never Medicaid**	76,534.69	85.16%	± 3.04

\* Medicaid @ any time is defined as having Medicaid-paid prenatal care or Medicaid-paid delivery

\*\* Medicaid never is defined as any other insurance status (including no insurance) other than Medicaid

## Factors to consider in postpartum contraceptive use

There are a variety of contraceptive options available to women. The decision of what method to use is a personal one and is influenced by a variety of factors. Cost, convenience, partner's preference, side effects, reversibility, and a woman's self-efficacy are but some of the issues women must consider. The postpartum woman has additional factors to consider such as hematologic and physiological changes resulting from pregnancy and birth, and infant feeding practices.

### Hematologic Factors

During the postpartum period women have an increased risk of thrombophlebitis.<sup>1</sup> Women who use oral contraceptives containing oestrogen also have an increased risk for that condition.<sup>2</sup> Therefore the hormonal contraceptive methods should be used with caution and considering potential contraindications.<sup>1,3,4</sup>

### Physiologic Factors

During the postpartum period the reproductive system regresses to its non-pregnancy state. Some areas are permanently altered as a result of pregnancy and delivery.<sup>4</sup> Certain barrier methods such as the diaphragm have to be refitted after the physiological changes cease (approximately 6 weeks postpartum).<sup>4</sup>

### Infant Feeding Practices

The decision to breastfeed can have a profound impact on contraception. Women who breastfeed experience a delay in ovulation because of hormonal changes, while women who do not can expect fertility to return in approximately 45 days.<sup>2,4,5</sup> The duration of this period of lactation amenorrhea depends on maternal nutrition, the length and, intensity of the breastfeeding period.<sup>2,4,6</sup>

88.45%) with a high school diploma or a GED, 89.26% (95% CI 85.12%-93.40%) of women with some college, and 83.10% (95% CI 77.77%-88.43%) with a college degree or beyond reported using a contraceptive method in the postpartum period. There was no significant difference observed between Black and non-Black mothers. Neither was there a difference between women by marital status nor Medicaid status.

The remaining 14.66% (95% CI 12.19%-17.13%) of women who delivered in 2000, responded that they were not using birth control during their postpartum period. These women were then asked, "What were your reasons or your husband or partner's reasons for not doing anything to keep from getting pregnant?" The top reason women cited for not using a contraceptive method were:

- ◇ Reasons other than those listed on the questionnaire,
- ◇ They did not want to use birth control, and
- ◇ They were not having sex.

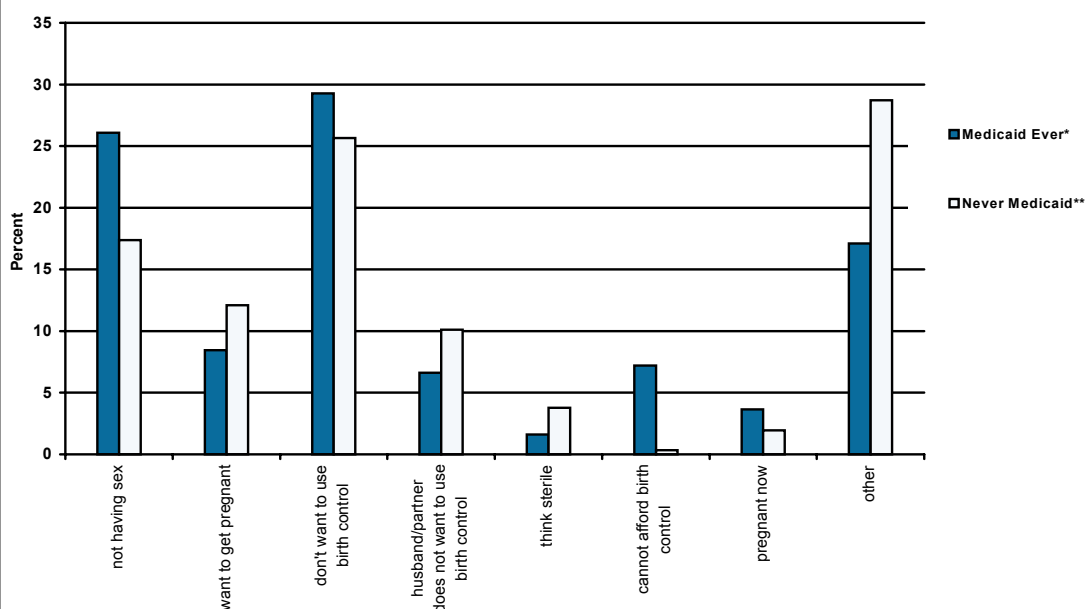
(Fig. #1)

The reasons women had for not using a contraceptive method during their postpartum period were stratified by demographic and socioeconomic status. The highest ranking reason for not using birth control for both women age 19 years or less and age 40 years or more was, "I am not having sex." (33.32% and 35.58%, respectively). The most common reason cited by women age 20-29 years was that they did not want to use birth control (29.64%). Women age 30-39 cited reasons other than the options on the questionnaire as their most common reason for not using birth control (35.47%). The most frequent answer for not using a contraceptive in women with less than a high school diploma and women with at least a college degree was that they did not want to use birth control (23.86% and 35.93%, respectively). Women with at least a high school diploma, but less than a college degree, mentioned reasons other than those on the questionnaire (26.50% and 26.49%, respectively). A

vast majority of Black women responded that they were not having sex (42.43; 95% CI 40.06%-44.80%) as their reason for not using birth control. Not wanting to use birth control was the most popular reason among non-Black women (26.76%; 95% CI 21.23%-38.29%). Of the 13.62% of women who either had Medicaid before pregnancy, Medicaid-paid prenatal care, or Medicaid-paid delivery and who responded that they were not using birth control, 27.82% stated that they "did not want to use birth control," followed by, "not having sex," (24.79%). Women who were never on Medicaid cited reasons other than those on the questionnaire as their most common reason for not using birth control (29.30%).

Among women who were using a contraceptive method during their postpartum period the overall most popular method was the birth control pill followed by the condom. The least popular was Norplant. Across all age groups with the exception of women ages 40 or more, the pill followed by the condom were the most popular

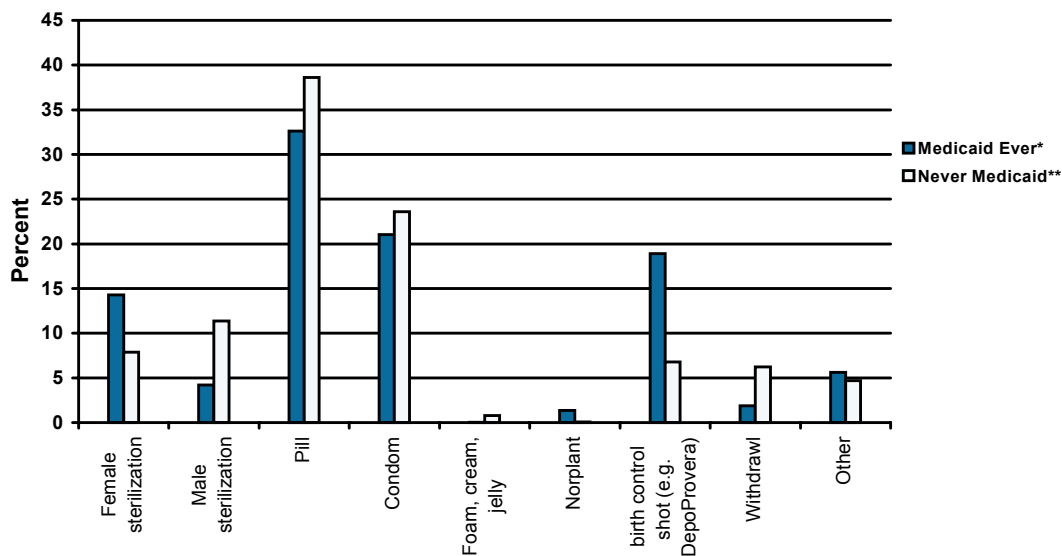
Fig. 1 Reasons for not using birth control by Medicaid status, 2000 PRAMS



\* Medicaid ever is defined as having Medicaid-paid prenatal care, or Medicaid-paid delivery

\*\* Never Medicaid is defined as any other insurance status (including no insurance) other than Medicaid.

Fig. 2 **Contraceptive method by Medicaid status, 2000 PRAMS**



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methods. Women over the age of 40 years preferred sterilization methods over other forms of contraception. Among the different educational levels, only women with less than a high school diploma preferred the contraceptive shot to the birth control pill. The pill and condom was the most popular method across marital status, race/ethnicity, and Medicaid status (Fig #2).

The ideal time for family planning counseling is prior to delivery. After the delivery new mothers are often preoccupied with the new infant and are unable to concentrate on family planning issues. When asked about topics discussed during their prenatal care visits, 79.32% of women indicated that they had a discussion about their

postpartum contraceptive plans. Significantly more women between the ages of 19 years or less indicated having a discussion about family planning during their prenatal care visits than women in other age groups. There were no significant differences between the proportion of women who were counseled during their prenatal care visits when stratified by education, race, or marital status. There was a significant difference in the proportion of women who were counseled by Medicaid status. A higher percentage of women who either had Medicaid before pregnancy, Medicaid-paid prenatal care, or Medicaid-paid delivery reported having a discussion about contraception than women who were never on

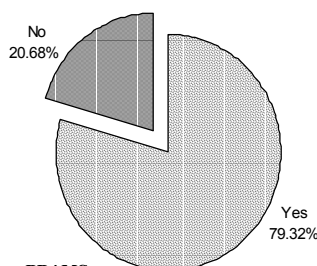
Medicaid (87.61% (95%CI 84.71%-90.51%) versus 75.36% (95%CI 71.95%-78.77%)). A large proportion of women receive family planning counseling either before or after delivery. However 32.95% (95%CI 25.58%-40.32%) of women who received no counseling during prenatal care also did not receive counseling after delivery (Fig. #3).

Postpartum contraception is important to prevent short interpregnancy intervals that are associated with a variety of risks to both the mother and the infant. Of the cohort of Michigan women who delivered in 2000, 2.37% (95%CI 0.17%-4.57%) were pregnant again before they had reach their sixth month postpartum.

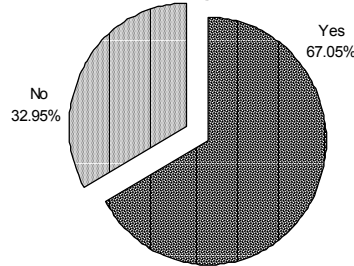
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Fig. 3

**Proportion of women who discussed postpartum contraception with a doctor, nurse, or health care worker during any of their prenatal care visits**



**Proportion of women who discussed postpartum contraception with a doctor, nurse, or health care worker after delivery among women who received no counseling during PNC**





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## Interpregnancy Interval and Maternal & Infant Health

Interpregnancy interval is the interval of time between two consecutive pregnancies minus the gestational age of the second infant. An interpregnancy interval of less than 18 months is associated with prematurity independent of race/ethnicity, maternal age, education level, parity, previous premature delivery or small-for-gestational age (SGA) infant, or level of prenatal care utilization.<sup>7,8,9,10</sup> When compared to women with an interpregnancy interval of 18 to 23 months, women with an interpregnancy interval of five months or less are:

- ◇ 2.54 times more likely to die,
- ◇ 1.73 times more likely to experience bleeding in the third trimester,
- ◇ 1.72 times more likely to experience premature rupture of membrane (PROM),
- ◇ 1.33 times more likely to experience puerperal endometritis, and
- ◇ 1.30 times more likely to experience anemia.<sup>11</sup>

## About PRAMS

Pregnancy Risk Assessment and Monitoring System (PRAMS) is a population-based survey of maternal experiences and behaviors before and during a woman's pregnancy and during early infancy of her child. African-American women and women who deliver low birth weight infants are over-sampled in order to ensure more accurate estimates. Each

year, approximately 1,000-3,000 new mothers are randomly selected from a frame of eligible birth certificates. A survey is mailed out to the women at two to six months after delivery, followed by telephone reminders to those who have not responded. In addition to the mailed surveys, a stratified systematic sample of African-American mothers is selected from

six inner city hospitals, where an initial interview is conducted followed by a mailed survey two to six months later. This is so we can better capture the experiences among African-American mothers and their infants. The results presented are weighted to represent all of Michigan's mothers and infants.

## Suggested Citation

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